

What is claimed is:

1. A network resource access system having a network resource coupled with a network behind a network firewall comprising:

5 a web services router coupled with a network accessible outside of a firewall protecting the network; and

a web services request generator external to the firewall of the network, the web services request generator being configured to generate a web services request including request content and configured to send the web services request to the web services router, which selectively passes the request content
10 to the network resource.

2. The network resource access system of claim 1, further comprising a mobile device external to the firewall of the network configured to prompt the web services request generator to generate a web services request and
15 configured to provide the web services request generator with a routing identifier for the network resource.

3. The network resource access system of claim 2, wherein the mobile device performs a discovery operation to obtain the routing identifier of the
20 network resource.

4. The network resource access system of claim 3, wherein the discovery operation is selected from the group including short-range radio frequency discovery, infrared discovery, radio frequency identifier tag based
25 discovery, Internet protocol to latitude longitude discovery, and manual discovery.

5. The network resource access system of claim 1, wherein the request content includes image data.

6. The network resource access system of claim 1, wherein the web services request includes a routing identifier having a first address configured to route the request to the web services router and a second address configured to route the request content to the network resource.

5

7. The network resource access system of claim 6, wherein the web services router is configured to process the web services request by translating the request content into a communications protocol and by forwarding the translated request content through the firewall to the network resource.

10

8. The network resource access system of claim 7, wherein the web services request includes at least one security credential, and wherein the web services router is configured to verify the at least one security credential, and selectively forward the translated request content to the network resource based on the at least one security credential.

15

9. The network resource access system of claim 8, wherein the web service router is configured to verify the at least one security credential by comparing the security credential to a list of authorized users.

20

10. The network resource access system of claim 7, wherein the communications protocol includes Simple Object Access Protocol (SOAP).

11. The network resource access system of claim 10, wherein the communications protocol includes at least one security credential.

25

12. The network resource access system of claim 1, wherein the request generator is resident on a system component selected from the group including: a mobile device, a home application server, and a content server.

30

13. The network resource access system of claim 1, wherein the network resource is a printer.

14. The network resource access system of claim 1, wherein the
5 network resource is a projector.

15. The network resource access system of claim 1, further comprising a foreign application server coupled with the network behind the firewall and configured to perform one or more network application functions.

10

16. The network resource access system of claim 1, further comprising a foreign application server coupled with the network behind the firewall and configured to perform one or more network application functions, wherein the one or more network application functions are selected from the group including
15 rendering print content into printer readable format, verifying security credentials, routing translated content to the network resource, rendering projector content into projector readable format, and combinations thereof.

17. The network resource access system of claim 13, wherein the web
20 services router forwards the request content to the foreign application server for processing by the one or more network application functions.

18. A method of accessing a network resource within a target network from outside a firewall of the target network, the method comprising:

25 receiving a web services request to access the network resource from outside the firewall of the target network, wherein the web services request includes request content and a network resource identifier; and

selectively authorizing the request content to penetrate the firewall of the target network to access the identified network resource.

30

19. The method of claim 18, further comprising:
generating a network resource call including the request content and a
destination address derived from the network resource identifier; and
sending the network resource call through the firewall to the destination
5 address.

20. The method of claim 19, wherein receiving the request to access a
network resource includes receiving the web services request in XML using a
Simple Object Access Protocol.

10

21. The method of claim 18, wherein receiving the web services
request includes receiving a security credential.

22. The method of claim 21, wherein selectively authorizing the request
15 content to penetrate the firewall includes authenticating a security credential and
authorizing the request content to penetrate the firewall upon the security
credential being authenticated.

23. The method of claim 22, wherein authenticating the at least one
20 security credential includes matching the at least one the security credential to a
user on a list of authorized users.

24. A method of accessing a foreign network resource by a mobile
device external to the foreign network, the method comprising:
25 accessing a home network by a mobile device;
selecting a foreign network resource; and
initiating a web services request for access to the selected foreign network
resource.

25. The method of claim 24, further comprising discovering at least one foreign network resource.

26. The method of claim 24, wherein discovering at least one foreign
5 network resource includes using a discovery operation selected from the group including short-range radio frequency discovery, infrared discovery, radio frequency identifier tag based discovery, Internet protocol to latitude longitude discovery, and manual discovery.

10 27. The method of claim 26, further comprising providing a list of network resources to the mobile device, wherein selecting a foreign network resource includes selecting from the list provided to the mobile device.

28. The method of claim 24, wherein initiating a web service request
15 includes prompting an application server on the home network to generate a web service request, wherein the web service request includes request content for delivery to the selected foreign network resource.

29. The method of claim 24, further comprising instructing the
20 application server to deliver the request content to the selected foreign network resource.

30. A media storage device including instruction for accessing a
25 network resource within a target network from outside a firewall of the target network, the instructions comprising instructions to:

receive a web services request to access the network resource from outside of the firewall of the target network, wherein the web services request includes request content and a network resource identifier; and

selectively authorize the request content to penetrate the firewall of the
30 target network to access the identified network resource.

31. The media storage device of claim 30, further including instructions to:

generate a network resource call including the request content data and a destination address derived from the network resource identifier; and

5 send the network resource call through the firewall to the destination address.

32. The media storage device of claim 30, wherein instructions to receive the web services request include instructions to receive the web services request in XML using a Simple Object Access Protocol.

33. The media storage device of claim 30, wherein instructions to receive the web services request include instructions to receive a security credential.

15 34. The media storage device of claim 33, wherein the instructions to selectively authorize the request content to penetrate the firewall include instructions to authenticate a security credential and instructions to authorize the request content to penetrate the firewall upon the security credential being

20 authenticated.

35. The media storage device of claim 34, wherein the instructions to authenticate the at least one security credential include instructions to match the at least one security credential to a user on a list of authorized users.

25 36. A media storage device including instructions to access a foreign network resource from a mobile device external to the foreign network, the instructions comprising instructions to:

access a home network from a mobile device;

30 select a foreign network resource; and

initiate a web services request for access to the selected foreign network resource.

37. The media storage device of claim 36, further including instructions to discover at least one foreign network resource.

38. The media storage device of claim 36, wherein instructions to
5 discover at least one foreign network resource include instructions to use a discovery operation selected from the group including: short-range radio frequency discovery, infrared discovery, radio frequency identifier tag based discovery, Internet protocol to latitude longitude discovery, and manual discovery.

10 39. The media storage device of claim 36, wherein instructions to initiate a web service request include instructions to prompt an application server on the home network to generate a web service request, wherein the web service request includes request content for delivery to the selected foreign network resource.

15 40. The media storage device of claim 39, further including instructions to instruct the application server to deliver the request content to the selected foreign network resource.

20 41. A network resource access system having a network resource coupled with a network behind a network firewall comprising:

a means for processing web services communications coupled with a network accessible outside of a firewall protecting the network; and

a means for generating a web services request external to the firewall of
25 the network configured to communicate with the means for processing web services communications, wherein the means for generating a web services request is configured to generate a web services request containing content and send the web services request to the means for processing web services communications, wherein the request seeks access to the network resource.